

All communications respecting this case should identify it by number and names of parties.



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Applicant: Canich  
Serial No.: 07/676,690  
Filed: March 28, 1991  
For: OLEFIN POLYMERIZATION  
CATALYSTS  
Accorded Benefit of: Ser. Nos.  
07/533,245, filed 06/04/90,  
now Patent No. 5,055,438;  
07/406,945, filed 09/13/89,  
now abandoned

Pursuant to the APJ's decision on preliminary motion,  
Interference No. 102,954 is redeclared as follows:

- (1) Count 1 is deleted and count 2 is substituted  
therefore.
- (2) Ser. No. 07/676,690 is added to this proceeding  
and claims 18-33 of that application are designated as  
corresponding to the count.
- (3) Canich reissue application, Ser. No. 07/973,107 is  
added to this proceeding and claims 1-13 of that application are  
designated as corresponding to the count.

The claims of the parties corresponding to the count  
are:

Canich '690: Claims 18-33.

Canich patent: Claims 1-13.

Canich reissue: Claims 1-13.

Stevens et al.: Claims 7-10, 14/10, 29, 30, and 31-32.

Serial No. 676,690

The parties involved in this interference are:

Junior Party

Applicant: Jo Ann M. Canich

Address: 900 Henderson Avenue, #808, Webster, TX 77058

Serial No.: 07/676,690, filed 03/28/91

For: OLEFIN POLYMERIZATION CATALYSTS

Assignee: Exxon Chemical Patents, Inc.

Attorneys of Record: Ben C. Cadenhead and Myron B. Kurtzman

Associate Attorney: None

Accorded Benefit of: Ser. Nos. 07/533,245, filed 06/04/90, now  
U.S. Patent No. 5,055,438, grant 10/08/91; and  
07/406,945, filed 09/13/89, now abandoned.

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Junior Party

Patentee: Jo Ann M. Canich

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Serial No.: 07/581,817, filed 09/13/90, now Patent No.  
5,026,798, issued 06/25/91

For: PROCESS FOR PRODUCING CRYSTALLINE POLY-ALPHA-OLEFINS WITH A  
MONOCYCLOPENTADIENYL TRANSITION METAL CATALYST SYSTEM

Assignee: Exxon Chemical Patents, Inc., Linden, NJ

Attorneys of Record: Ben C. Cadenhead and Myron B. Kurtzman

Associate Attorney: David W. Plant, W. Edward Bailey, Glenn A.  
Ousterhout, Donald L. Rhoads, and Ronald A. Krasnow

Serial No. 676,690

Accorded Benefit of: U.S. Ser. Nos. 07/533,245, filed 06/04/90,  
now U.S. Patent No. 5,055,438, issued 10/08/91;  
07/406,945, filed 09/13/89, now abandoned

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Junior Party

Applicant: Jo Ann M. Canich

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Re Serial No.: 07/973,107, filed 11/06/92

For: PROCESS FOR PRODUCING CRYSTALLINE POLY-ALPHA-OLEFINS WITH A  
MONOCYCLOPENTADIENYL TRANSITION METAL CATALYST SYSTEM

Assignee: Exxon Chemical Patents, Inc.

Attorneys of Record: Ben C. Cadenhead, Myron B. Kurtzman,  
David W. Plant, W. Edward Bailey, Glenn A. Ousterhout,  
Donald L. Rhoads and Ronald A. Krasnow

Associate Attorney: None

Accorded Benefit of: Ser. Nos. 07/581,817, filed 09/13/90, now  
Patent No. 5,026,798, granted 06/25/91; 07/533,245,245  
filed 06/04/90, now U.S. Patent No. 5,055,438, granted  
10/08/91; and 07/406,945, filed 09/13/89, now abandoned

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Serial No. 676,690

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1618 North Road, Lake Jackson, TX 77566  
4523 Bermuda Drive, Sugar Land, TX 77479

Serial No: 07/545,403, filed 07/03/90

For: CONSTRAINED GEOMETRY ADDITION POLYMERIZATION CATALYSTS,  
PROCESSES FOR THEIR PREPARATION, PRECURSORS THEREFOR,  
METHODS OF USE, AND NOVEL POLYMERS FORMED THEREWITH

Assignee: The Dow Chemical Company

Attorneys: Douglas N. Deline, Bruce M. Kanuch and Richard G. Waterman

Associate Attorney: Keith V. Rockey, Charles L. Gholz, Alton D. Rollins and Robert W. Hahl

Accorded Benefit of: U.S. Ser. No. 07/428,283, filed 10/27/89;  
07/401,345, filed 08/31/879, all abandoned

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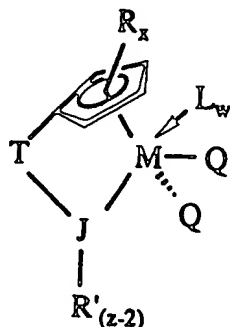
Count 2

A process for polymerizing one or more olefins, diolefins or acetylenically unsaturated compounds comprising the steps of

(i) contacting an olefin, diolefin or acetylenically unsaturated monomer at a temperature and pressure sufficient to polymerize such monomer with a catalyst system comprising;

(A) an alumoxane, and

(B) a group IV-B transition metal component of the formula




wherein M is Zr, Hf or Ti in its highest formal oxidation state;

R is a substituent group with "x" denoting the degree of substitution (x = 0, 1, 2, 3 or 4) and each R is, independently, a radical selected from a group consisting of C<sub>1</sub>-C<sub>20</sub> hydrocarbyl radicals, substituted C<sub>1</sub>-C<sub>20</sub> hydrocarbyl radicals substituted C<sub>1</sub>-C<sub>20</sub> hydrocarbyl radicals wherein one or

more hydrogen atoms is replaced by a halogen radical, an amido radical, a phosphido radical, an alkoxy radical or any other radical containing a Lewis acidic or basic functionality,  $C_1-C_{20}$  hydrocarbyl-substituted metalloids wherein the metalloid is selected from the Group IV-A of the Periodic Table of Elements, and halogen radicals, amido radicals, phosphido radicals, alkoxy radicals, alkylborido radicals or a radical containing Lewis acidic or basic functionality, or at least two adjacent R-groups are joined forming  $C_4-C_{20}$  ring to give a saturated or unsaturated polycyclic cyclopentadienyl ligand;

$(JR'_{z-2})$  is a heteroatom ligand in which J is an element with a coordination number of three from Group V-A or an element with a coordination number of two from Group VI-A of the Periodic Table of Elements, and  $R'$  is a radical selected from a group consisting of  $C_1-C_{20}$  hydrocarbyl radicals, substituted  $C_1-C_{20}$  hydrocarbyl radicals where one or more hydrogen atom is replaced by a halogen radical, an amido radical, a phosphido radical, an alkoxy radical or a radical containing a Lewis acidic or basic functionality, and "z" is the coordination number of the element J;

Serial No. 676,690

each Q is, independently, any univalent anionic ligand or two Q's are a divalent anionic chelating ligand, provided that Q is different from ;

T is a covalent bridging group containing a Group IV A or V A element;

L is a neutral Lewis base where "w" denotes a number from 0 to 3; and

(ii) recovering a polymer.

The claims of the parties corresponding to the count are:

Canich '690: Claims 18-33.

Canich patent: Claims 1-13.

Canich reissue: Claims 1-13.

Stevens et al.: Claims 7-10, 14/10, 29, 30, and 31-32.



Mary F. Downey  
Administrative Patent Judge  
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MFD/raj